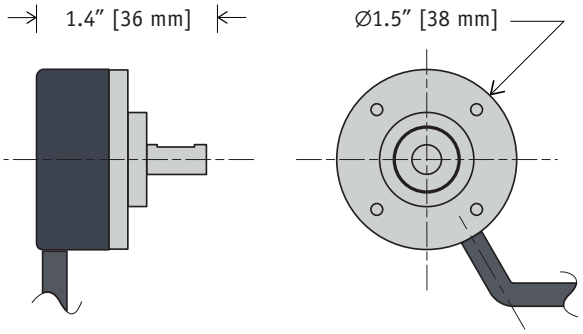
CS15

Rotary Incremental Encoder

100 to 2500 Pulses Per Revolution
Size 15, Low Profile Design • 5..28 VDC, Push-Pull Driver
OEM or Industrial Applications
In Stock for Quick Delivery





GENERAL

Pulses Per Revolution Options	100, 1000, 2000, 2500
Output Driver	push-pull ($V_{out} = V_{in}$)
Input Voltage (V_{in})	5...28 VDC
Input Current	100 mA max.
Load	20 mA max.
Maximum Shaft Speed	8000 RPM
Maximum Frequency	200 kHz
Electrical Connection	18-inch, 26 AWG multi-conductor cable

MECHANICAL

Flange	aluminum
Shaft	stainless steel
Shaft Loading, Radial	5 lbs (22 N) max.
Shaft Loading, Axial	5 lbs (22 N) max.
Starting Torque	approx. .05 oz-in. (.35 N-mm) @ ambient temperature
Bearing Type	precision ball bearings
Bearing LIfe, @60% of full rated load	1.2×10^{10} revolutions
Moment of Inertia	6.7×10^{-5} oz-in-sec^2 (4.8 gm-cm^2)
Maximum Acceleration	1×10^5 rad/sec^2
Weight	3 oz.

ENVIRONMENTAL

Environmental Suitability	IP50
Operating Temperature	0–185° F (-20–85° C)
Storage Temperature	-13°–185° F (-25°–85°C)
Humidity	98% RH non-condensing
Vibration	10 g @ 58 to 500 Hz
Shock	80 g @ 11 ms duration

The CS15 is Celesco's compact industry standard size 15, servo-mount incremental encoder. With a low profile of less than an inch in height and a diameter of only 1.5 inches, the economically priced CS15 is perfect for both the OEM and single-piece user alike. Precision ball bearings support a durable stainless steel shaft for reliable, long life operation.

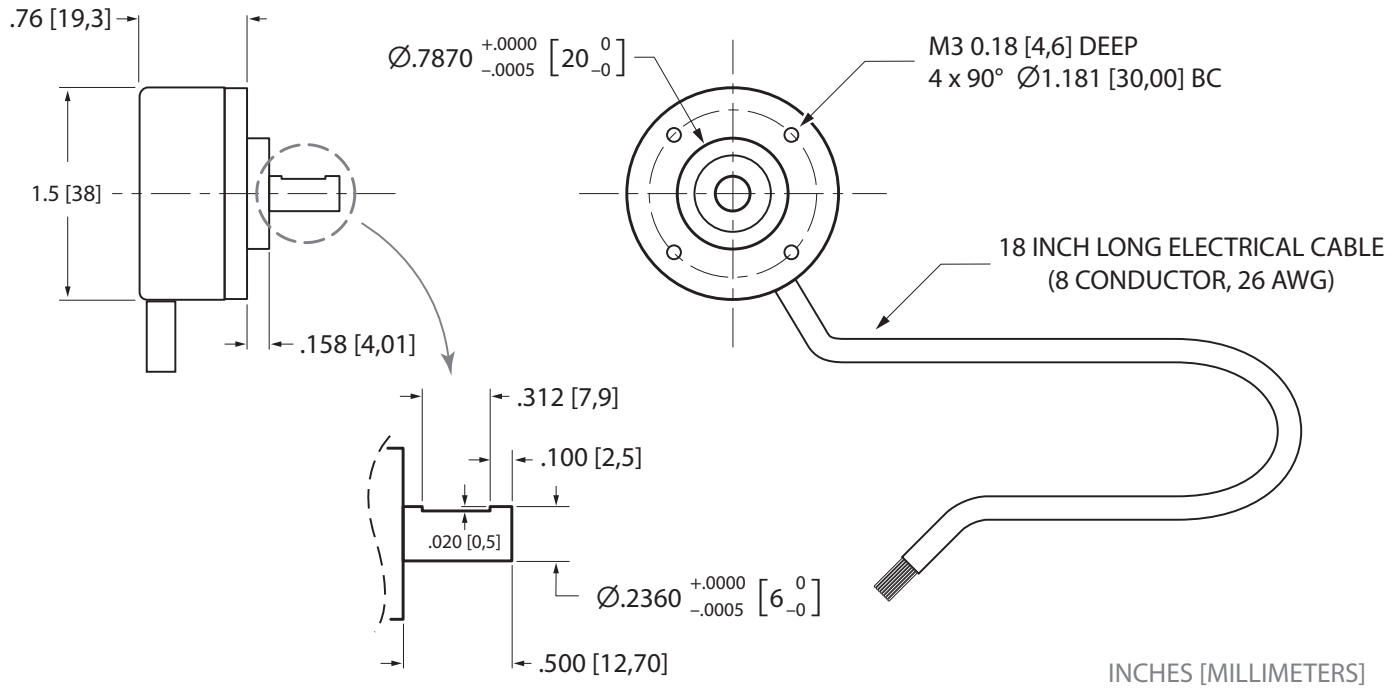
Standard features include 100, 1000, 2000 or 2500 pulses per turn option, a push pull driver and complementary output channels for single-ended or differential output connection. Every encoder ships with state of the art opto-asic circuitry designed to provide a clean, reliable output signal to just about any PLC or electrical interface.

ORDERING INFORMATION

Order Number	*pulses per turn*
CS15-100	100
CS15-1000	1000
CS15-2000	2000
CS15-2500	2500

20630 Plummer Street • Chatsworth, CA 91311
tel: 800.423.5483 • +1.818.701.2750 • fax: +1.818.701.2799

Outline Drawing:

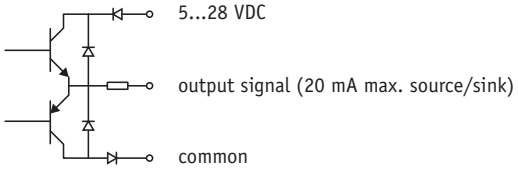


Signal Connections

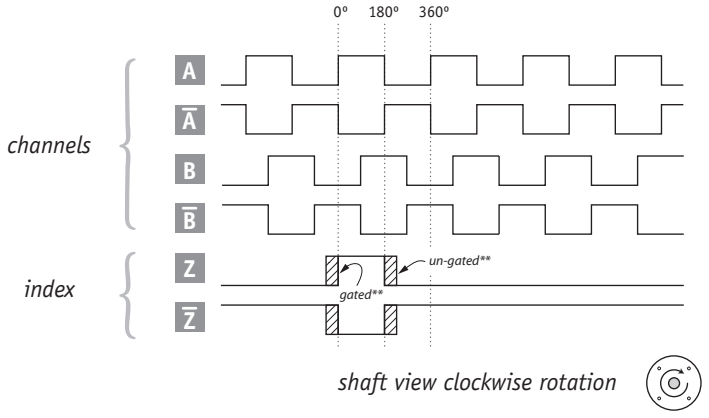
color	signal
red	**5...28 VDC**
black	**common**
green	**channel A**
blue	**channel A′**

color	signal
white	**channel B**
gray	**channel B′**
yellow	**Z**
orange	**Z′**

Output Driver (1 of 4):



Output Waveforms



***note: – 1000, 2000, 2500 pulses-per-turn options — gated to A , index pulse =180°*
– 100 pulses-per-turn option — ungated, index pulse = approx 270°

version: **2.1** last updated: **August 4, 2014**